

A new *Bolma* from Madagascar

(Mollusca, Gastropoda, Turbinidae)

Axel Alf & Kurt Kreipl

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A species of the genus *Bolma* Risso, 1826, from South West Madagascar is described as new. *Bolma sabinae*, spec. nov. belongs to the smaller species of the genus and lives in deep water. The species is similar to *Bolma minutiradiosa* Kosuge, 1983 but has a purple-red stained columellar and umbilical callus.

Prof. Dr. Axel Alf, University of Applied Sciences Weihenstephan, D-91746 Triesdorf, Germany; e-mail: axel.alf@fh-weihenstephan.de

Kurt Kreipl, Meeresmuseum Öhringen, Höhenweg 6, D-74613 Öhringen, Germany; e-mail: meeresmuseum@t-online.de

Introduction

Shrimp trawlers working off Tuléar, Madagascar brought up a *Xenophora pallidula* (Reeve, 1842) on which were attached 3 specimens of a small *Bolma*. This species is different from the other species of the genus, it looks similar to *Bolma minutiradiosa* Kosuge, 1983, but differs in characteristic features, especially in having a thick, purple-red stained columellar and umbilical callus. Therefore, it is described here as new.

Bolma sabinae, spec. nov.

Figs 1–3

Types. Holotype: Diameter 19.1 mm, diameter of protoconch about 0.3 mm (not clearly visible because of corrosion), height 16.2 mm, 5 teleoconch whorls, dead on *Xenophora pallidula* (Zoologische Staatssammlung München, Germany, ZSM Moll 20040204).

Paratype 1: Diameter 18.2 mm, height 13.9 mm, dead on *Xenophora pallidula* (collection A. Alf, Weidenbach, Germany, lot no. 112027a)

Paratype 2: Diameter 17.8 mm (lip broken), height 15.4 mm, dead on *Xenophora pallidula* (collection K. Kreipl, Öhringen, Germany, lot no. 10106)

Type locality. Off Tuléar, S.W. Madagascar, trawled by

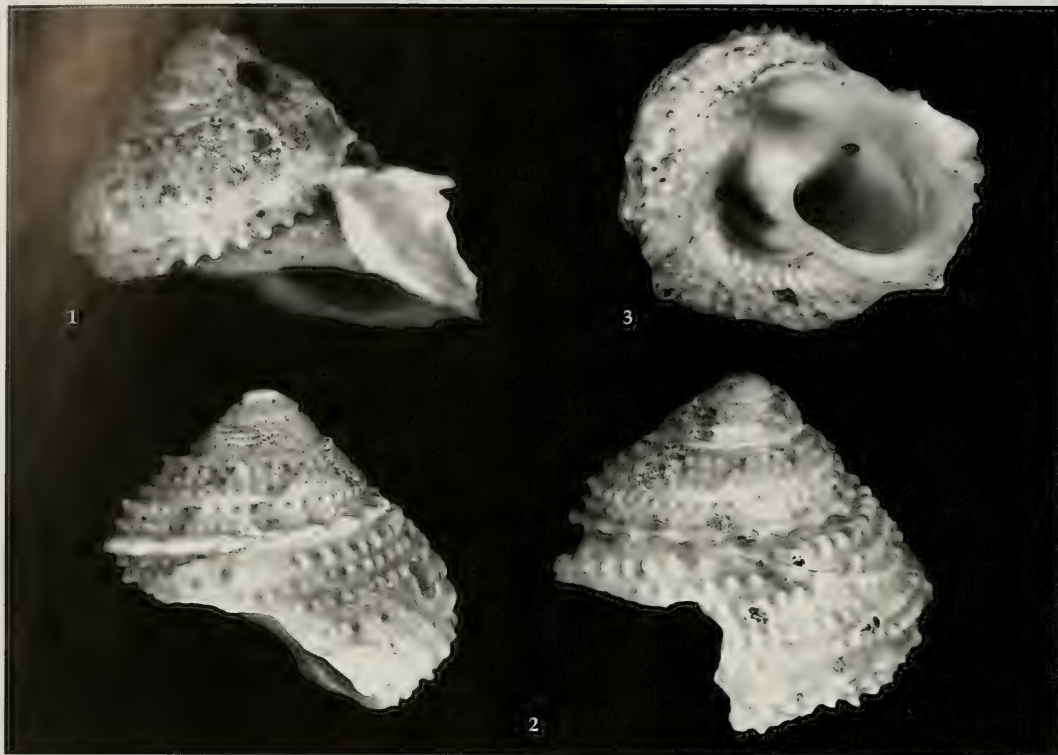
shrimpers at 100 m, on *Xenophora pallidula* (Reeve, 1842), probably on muddy bottom.

Description

Shell small, broad coniform, adults reaching a diameter of about 20 mm, shell of medium thickness, wider than tall (h/d about 0.8 including spines). Teleoconch of 5 whorls. First whorl flat with a carina at the shoulder; the following whorls sloping slightly convex beneath the suture, broadly rounded at the periphery; sculptured with 5 rows of strong beads and a row of small protrusions at the peripheral angle which are directed horizontally; basal angle marked by a row of larger, prominent beads. Space between protrusions and basal angle with 1 row of beads. Base with 3 rows of prominent beads. Umbilical callus turning into a row of broad, short axial ribs. The whole shell is covered with very fine, axial, prosocline lamellae.

Suture hardly visible, covered by the peripheral protrusions.

Columella smooth and evenly rounded, forming a denticle at the base; columellar callus present, thick in adult species, with a shallow groove at the outer edge, running into the aperture. Aperture oval, outer lip flaring in adult specimens. Umbilicus covered by a broad callus which fuses with the columellar callus.



Figs 1-3. *Bolma sabinae*, nov. spec. 1. Holotype. 2. Paratypes: paratype 1 (left), paratype 2 (right). 3. Base and aperture of the holotype showing columellar and umbilical callus.

Basic colour very light purplish brown, with or without a few small, irregular darker blotches, colour of the base and between periphery and base distinctly lighter. Between the beads above the periphery with small purple dots, on the protrusions indistinct, light purple colorations. Columellar and umbilical-callus whitish with a dark purple-red staining. Columella white and nacreous, aperture nacreous within.

Operculum not available.

Etymology. The species is named after Sabine Alf, the senior author's wife.

Discussion

Only few species of the genus *Bolma* are known from the western Indian Ocean: *Bolma andersoni* (Smith, 1902) *Bolma somaliensis* Beu & Ponder, 1979, *Bolma guttata* (Adams, 1863), *Bolma tayloriana* (Smith, 1880), and *Bolma henica* (Watson, 1885). From Madagascar up to now only *Bolma guttata* and *henica* were known.

Bolma andersoni, *B. tayloriana*, and *B. guttata* are much larger than *B. sabinae*, *Bolma henica* is uniform white and usually has long peripheral spines, *Bolma somaliensis* is relatively higher. None of these species has a purple-red coloration of the columellar and umbilical callus.

The most similar species is *Bolma minutiradiosa* Kosuge, 1983 recorded from Japan and the Philippines. This species is smaller and flatter, has stronger peripheral spines, darker coloration, a white umbilical callus, while a columellar callus is almost missing.

References

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